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| 09/204,142      | 12/03/1998  | YUKO ARAI            | 041-2048            | 5104             |

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EXAMINER

LONSBERRY, HUNTER B

ART UNIT PAPER NUMBER

2611

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/204,142

Applicant(s)

ARAI ET AL.

Examiner

Hunter B. Lonsberry

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2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 47-86 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-86 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 76 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,311,329 to Terakado.

Regarding claims 76, Terakado discloses in Figures 4, 10 and 11, several sets of related EPG data A1-A3 and B1-3, the program description information and reference information may be sent different streams or even different media, the EPG data is displayed on a screen (column 6, lines 25-column 7, line 46, column 9, line 42-column 10, line 13 column 10, lines 14-60).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,311,329 to Terakado.

Regarding claim 77, Terakado discloses in Figures 4, 10 and 11, several sets of related EPG data A1-A3 and B1-3, the program description information and reference information may be sent different streams or even different media (column 6, lines 25-column 7, line 46, column 9, line 42-column 10, line 13). Terakado does not disclose checking whether or not program description information is checked prior to transmission. The examiner takes official notice that checking buffers for information is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to check whether or not data to be transmitted was present thus ensuring that a subscriber would receive EPG data.

Regarding claim 78, Terakado discloses in Figures 4, 10 and 11, several sets of related EPG data A1-A3 and B1-3, the program description information and reference information may be sent different streams or even different media, the EPG data is displayed on a screen (column 6, lines 25-column 7, line 46, column 9, line 42-column 10, line 13 column 10, lines 14-60). Terakado does not disclose checking whether or not program description information is checked prior to transmission. The examiner takes

official notice that checking buffers for information is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to check whether or not data to be transmitted was present thus ensuring that a subscriber would receive EPG data.

Claims 47- 52, 53, 55-60, 77, 78 80, 80-82 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,311,329 to Terakado in view of U.S. Patent 6,477,705 to Yuen.

Regarding claims 47, 52, 55, 56, 80, and 81, Terakado discloses in Figures 4 and 11, several sets of related EPG data A1-A3, each of which have differing layers of detail and differing program descriptions, and may be sent via different streams or even different media, the data includes channel data (column 6, lines 39-column 7, line 46, column 9, line 42-column 10, line 13), the program guide is displayed on a TV from data received in receiver 5 (column 5, lines 47-57). Terakado does not disclose different amount of detail for the same program. Yuen discloses an EPG in Figures 18 and 20-24 that displays program guide data with different levels of detail related to the same program (column 10, lines 38-51, column 11, lines 2-22, column 12, lines 14-48). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado to include a second set of more detailed information related to a program, thus enabling a user to make better viewing choices.

Regarding claims 48, 50 and 57, Terakado discloses that the amount of detail transmitted for each set of data is changeable (column 6, lines 25-47).

Regarding claim 49, Terakado discloses in Figure 4, that the A2 set is more detailed than the A1 data set. Yuen discloses in Figures 20-22, that detail 44 is more detailed than detail 48.

Regarding claim 51, Terakado discloses that the detailed program data may be modified by a user (column 6, lines 26-37).

Regarding claims 53, 57, 58 and 68, Terakado discloses in Figures 4 and 11, several sets of related EPG data A1-A3, each of which have differing layers of detail and differing program descriptions, and may be sent different streams or even different media, the data includes channel data and may be modified (column 6, lines 25-column 7, line 46, column 9, line 42-column 10, line 13). Terakado/Yuen does not disclose updating EPG information over time or for updating the start and end time of a program. The examiner takes official notice that the transmission of EPG updates is well known in the art. Terakado/Yuen inherently transmit more detail over time during the EPG information updates as Yuen discloses that EPG data may be transmitted via the VBI and Terakado discloses that it may be transmitted via a stream, since it takes time to transmit the program guide data and it can not be instantly transmitted in its entirety, Terakado/Yuen must transmit more program guide information over time. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado/Yuen to transmit an EPG update to that a subscriber would be able to readily find programs they wished to watch.

Regarding claim 54, Terakado discloses that the EPG information may be edited (column 6, lines 25-column 7, line 46).

Regarding claim 59, 62, and 82, Terakado discloses in Figures 4 and 11, several sets of related EPG data A1-A3, each of which have differing layers of detail and differing program descriptions, and may be sent different streams or even different media such as a telephone (Figure 11), the data includes channel data (column 6, lines 39-column 7, line 46, column 9, line 42-column 10, line 13), the program guide is displayed on a TV from data received in receiver 5 (column 5, lines 47-57). Terakado does not disclose different amount of detail for the same program. Yuen discloses an EPG in Figures 18 and 20-24 that displays program guide data with different levels of detail related to the same program (column 10, lines 38-51, column 11, lines 2-22, column 12, lines 14-48). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado to include a second set of more detailed information related to a program, thus enabling a user to make better viewing choices.

Regarding claims 60, 63, 66, and 69 Terakado discloses that the EPG information may be edited (column 6, lines 25-column 7, line 46). Terakado does not disclose changing the amount of detail in the EPG data based upon settings that control detail levels. The examiner takes official notice that the use of truncation settings to limit details is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado to include detail truncation settings so that a user would not be overwhelmed with descriptive information.

Regarding claims 61, 64, 67, and 70, Terakado discloses that the EPG information may be edited (column 6, lines 25-column 7, line 46). Terakado does not disclose changing the association of channels and their broadcast streams and then

transmitting that data to the subscribers. The examiner takes official notice that updating channel assignments in EPG data is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado to update channel associations and their EPG data so that subscribers would have accurate program information when channel lineups change.

Regarding claim 65, Yuen discloses an EPG in Figures 18 and 20-24 that displays program guide data with different levels of detail related to the same program (column 10, lines 38-51, column 11, lines 2-22, column 12, lines 14-48).

Regarding claim 84, Terakado discloses in Figure 11, that the A1 data is transmitted in the VBI for a program and the EPG information is TV EPG information (column 5, lines 47-57).

Claims 71-75, 83, 85 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,311,329 to Terakado in view of U.S. Patent 6,477,705 to Yuen and U.S. Patent 6,405,372 to Kim.

Regarding claim 71, 72, and 83, Terakado discloses in Figures 4 and 11, several sets of related EPG data A1-A3, each of which have differing layers of detail and differing program descriptions, and may be sent different streams or even different media, the data includes channel data (column 6, lines 39-column 7, line 46, column 9, line 42-column 10, line 13), the program guide is displayed on a TV from data received in receiver 5 (column 5, lines 47-57). Terakado does not disclose transmitting both the 1<sup>st</sup> and second data sets into the broadcast stream for each channel, and different levels of

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program information for the same program. Yuen discloses an EPG in Figures 18 and 20-24, which displays program guide data with different levels of detail, related to the same program (column 10, lines 38-51, column 11, lines 2-22, column 12, lines 14-48). Kim discloses a system in Figures 1 and 2, in which EPG data for each channel is carried within each channels bit stream, the second tuner tunes to each subsequent channel and stores the EPG data (column 2, line 55- column 3, line 38). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado to carry EPG data in each channel service as taught by Kim and different program descriptions for the same program as taught by Yuen, thereby increasing reliability by offering EPG data on multiple streams instead of a single stream and enabling a subscriber to make better viewing choices.

Regarding claim 73, Terakado discloses that the amount of detail transmitted for each set of data is changeable (column 6, lines 25-47).

Regarding claim 74, Terakado discloses in Figures 4 and 11, several sets of related EPG data A1-A3, each of which have differing layers of detail and differing program descriptions, and may be sent different streams or even different media, the data includes channel data and may be modified (column 6, lines 25-column 7, line 46, column 9, line 42-column 10, line 13). Terakado/Yuen/Kim does not disclose updating EPG information over time or for updating the start and end time of a program. The examiner takes official notice that the transmission of EPG updates, including new start and end times is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Terakado/Yuen/Kim to transmit an

EPG update to that a subscriber would be able to readily find programs they wished to watch.

Regarding claims 75, 85 and 86, Kim discloses that the EPG data corresponding to each channel may be transmitted along with the video data on that channel (column 2, line 55- column 3; line 38).

Claim 79 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,311,329 to Terakado in view of U.S. Patent 5,850,218 to LaJoie.

Regarding claim 79, Terakado does not disclose checking whether or not program description information is checked prior to transmission and does not disclose displaying a second program in the program guide and displaying that information along with a first selection in the EPG. The examiner takes official notice that checking buffers for information is well known in the art. LaJoie discloses in Figure 16, an EPG, which displays program information for a number of programs, a highlighted box 394 corresponds to further program information shown in box 346. Therefore, it would have been obvious to one skilled in the art at the time of invention to check whether or not data to be transmitted was present thus ensuring that EPG data would be received by a subscriber and to display program guide information for a plurality of channels at the same time along with more descriptive information to better allow a user to select programming.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5359 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

HBL  
May 19, 2003



**VIVEK SRIVASTAVA**  
**PATENT EXAMINER**